New Jersey Department of Transportation

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Baseline Document Change Announcement

Nonvegetative Surfaces Beneath Guide Rail and Signs BDC98D-004

August 20, 1998

Subject: Additions to the Standard Roadway Construction Details

A Construction Detail has been added to incorporate the application of nonvegetative surfaces underneath guide rail and signs. These additions have been developed by the Bureau of Landscape and Urban Design in an effort to reduce highway maintenance costs and are issued for immediate use in Department Projects. The additions to the *Standard Roadway Construction Details* are as follows:

- Added Sheet CD-814-1(Metric Version)
 - ♦ Added Detail Nonvegetative Surfaces Around Guide Rail Behind Curb or Raised Berm.
 - ♦ Added Detail Nonvegetative Surface at Edge of Pavement on Umbrella Section Where Guide Rail is Used.
 - ♦ Added Detail Nonvegetative Surfaces Around Guide Rail Anchorage Type I.
 - ♦ Added Detail Nonvegetative Surface at Median Guide Rail.
 - ♦ Added Detail Nonvegetative Surface Around Flared Guide Rail Where Guide Rail Offset From Edge of Pavement is 1.2 m or Less.
 - ♦ Added Detail Nonvegetative Surface Around Flared Guide Rail Where Guide Rail Offset From Edge of Pavement is Greater Than 1.2 m.
 - ♦ Added Detail Nonvegetative Surface Around Overhead Sign Foundations and Under Large Ground Mounted Signs.

Instructions to Designers

Where applicable to a project, a copy of Standard Roadway Construction Detail Sheet CD-814-1 must be provided in the contract plans.

The changes to the *Standard Specifications for Road and Bridge Construction*, 1996, Section 814, will be provided in the 1998 Supplement which include:

- Revised Section 814.02
 - Eliminated the use of dense-graded aggregate base course.
- Revise Section 814.04
 - Required that unstable material shall be removed and replaced.
- Revised Section 814.05
 - Required that nonvegetative surface be constructed prior to installation of guide rail and eliminated the text on existing guide rail.
 - ♦ Eliminated the use of dense-graded aggregate base course and increased the thickness of bituminous concrete surface course from 50 millimeters (2 inches) to 100 millimeters (4 inches).

- ♦ Waived the air voids, surface, and thickness requirements of Section 404 for the bituminous concrete surface course.
- Added compaction requirements.

In the mean time, Technical Specifications will insert the specification changes into the special provisions where appropriate.

In addition, there have been some changes to the *Design Manual - Roadway* as follows:

- Section 8-03.5, subpart 10 contains text describing conditions warranting the use of nonvegetative surfaces under guide rail. This went out under BDC97MR-003.
- The following changes to Section 13-03.3 will be incorporated into BDCMR-002 which will be going out this summer:

Section 13-03.3 Nonvegetative Surface Under Overhead Signs and Large Ground Mounted Signs

In order to reduce soil erosion and highway maintenance costs associated with spraying or trimming vegetation underneath signs, nonvegetative surfaces should be applied around the foundation of overhead signs and underneath large ground mounted signs as follows:

<u>Sign Types</u> <u>Conditions warranting use of nonvegetative surfaces</u>

Overhead signs

Sign bridge All cases
Sign cantilevers All cases

Large Ground mounted signs

Breakaway sign supports Mowable areas
Nonbreakaway sign supports Mowable areas

This surface treatment is not to be used at breakaway steel u-post sign locations.

The nonvegetative surfaces shall be constructed as shown in Standard Construction Detail CD-814-1 (Metric). For areas not specifically covered in the Construction Details, contact the Landscape and Urban Design Unit for guidance.

Distribution to In-House Staff and Various Public Agencies

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Electronic Detail files can be downloaded from the DOT Web Page at http://www.state.nj.us/transportation/design/caddsprt/roaddets.htm. Click on whatever detail you wish to view or download by following the instructions provided and accessed through NJDOT CADD Support website.

This memorandum along with a half scale copy of the Roadway Construction Detail Additions (Metric version only) will be distributed to In-House staff and various Public Agencies in accordance with the Roadway Construction Detail distribution list by the Document Control Unit. The hard copy distribution may be at least one month after date of this memorandum because of printing delays, so rely on the web for faster service. Please make additional copies as needed.

Distribution to other Outside Agencies (Consultants, Contractors, etc.)

This memorandum will be posted on the NJDOT's Electronic Bulletin Board System (BBS) under conference number 10 - "Highway Design", File Area 56 - "Baseline Document Change memorandums"

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Half scale copies of the Roadway Construction Detail Additions (Metric version only) can be obtained after one month of the date of this memorandum by contacting:

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